Email: forecasting.planning@aemo.com.au

Delta Electricity Response to Draft Inputs, Assumptions and Scenarios Report

Delta appreciates the opportunity to contribute to the development of the 2021 Input, Assumptions and Scenarios Report (IASR).

Delta owns and operates the 1,320 MW Vales Point power station in NSW and has retail licences to sell electricity and gas to large customers in all NEM jurisdictions. Delta has operated coal and gas fired generating plant in the National Electricity Market (NEM) since its start in 1998 and is an active participant in both the electricity and gas trading markets.

Delta appreciates AEMO's efforts at making the Integrated System Plan modelling process as transparent and consultative as possible. The comments in this submission cover three main areas: the treatment and presentation of transmission infrastructure costs; coal plant retirements; and the potential for demand shocks.

Delta observes that transmission project costs are subject to large variations as projects move from initial scoping and costing to more the detailed design and development stages of project development. A key example of this is Project EnergyConnect which increased in cost by 59% following the approval of the RIT-T by the AER. This is a far larger increase that contemplated by AEMO in its 2020 ISP where only a 30% increase was applied.

These large cost variations indicate that it would be sensible for AEMO to examine in detail the risk to the transmission development plan from cost increases as part of its modelling. It could do this in a number of ways, one of which may be to explicitly examine a scenario with materially higher transmission costs. For example, the assumed transmission project costs could all be increased by 50-75% under this scenario with the optimal development path re-examined in detail highlighting the additional requirements for non-network solutions. An alternative approach may be to explicitly identify the cost of each project that would make it infeasible as part of the transmission development plan for the NEM. This would be the cost beyond which the project would bring no net market benefits. Subjecting the network assumptions to this sort of rigorous examination would significantly improve the value of the ISP.

Delta notes that AEMO will be examining additional scenarios that include early closure of Victorian and northern NSW coal plant. Delta requests that AEMO release the full modelling details and results for each of these two early closure scenarios for consideration by stakeholders, including assumptions and, in particular, details of impact on wholesale prices and impact on remaining coal fired generators in each jurisdiction.

In addition, it would be informative for stakeholders to understand the change in market costs under a delayed coal closure scenario. Delta recommends that AEMO present the change in system cost that would result from delaying the retirement of a number of the large generators, particularly those in NSW that are scheduled to retire in the late 2020s/early 2030s.

Sunset Power International Pty Ltd t/as Delta Electricity ABN 75 162 696 335 ACN 162 696 335
SYDNEY OFFICE Level 5 / 580 George Street, Sydney NSW 2000 PO Box 7285 Mannering Park NSW 2259
Telephone 02 4352 6406 Facsimile 02 4352 6460 www.de.com.au

Delta notes AEMO's statements on NSW power system security services and particularly notes the significant differences between Tables 58 and 59 of the report reproduced below (pages 159 and 160), which are reproduced below. ie, the current arrangements in NSW in terms of the Primary Service Providers for each of the nine Power System Requirements listed versus AEMO's planning assumptions post 2025-26 (with Table 59 showing that Coal is not listed as the Primary Service Provider for any of the 9 services listed, including System Strength, post 2025-26). Delta therefore requests AEMO to clarify as a matter of urgency, and ahead of preparation of its draft 2022 ISP report, what it sees as the role of coal fired generators in NSW in terms of providing the nine listed power system requirements and, in particular, energy operating reserves and system strength. Additionally, Delta requests that AEMO provide relative cost estimates for the provision of each of these nine itemised Power System Requirements post 2025-26 by non-coal sources versus coal.

Table 58 Planning assumptions for the current New South Wales power system

Power System Requirement	Number of required synchronous generating units			IBR	HVDC inter-connection	AC inter-connection		Synchronous condensers	Demand side response	Distributed PV
	Gas	Coal	Hydro (inc PHES)		Directlink	QNI	VNI			
Bulk Energy										
Energy Balance										
Operating Reserve-ramping										
Inertial response and RoCoF										
Primary Frequency Control										
Secondary Frequency Control										
Fast voltage control										
Slow voltage control										
System Strength		≥ 7						Note [+]		

Notation: Primary service provider; Service provider; Partial service provider; No service provision

Table 59 Planning assumptions for the future New South Wales power system

Power System Requirement	Number of required synchronous generating units			IBR	HVDC inter-connection	AC inter-connection			Synchronous condensers	Demand side response	Distributed PV	BESS
	Gas	Coal	Hydro (inc PHES)		Directlink	QNI, QNI 2	VNI, VNI West	SA-NSW				
Bulk Energy												
Energy Balance												
Operating Reserve-ramping												
Inertial response and RoCoF									Note †			
Primary Frequency Control												
Secondary Frequency Control												
Fast voltage control												
Slow voltage control												
System Strength												

Notation: Primary service provider; Service provider; Partial service provider; No service provision

Delta appreciates the opportunity to provide input into AEMOs modelling processes. If any questions arise about the content of this submission, please contact Peter Wormald (peter.wormald@de.com.au).

Sincerely,

Peter Wormald
Manager Regulation, Risk and Strategy